Q2 2020
for the period ended September 30, 2019

COMPUTER MODELLING GROUP LTD.

To Our Shareholders

Computer Modelling Group Ltd. is pleased to announce its second quarter results for the three and six months ended September 30, 2019.

Second Quarter Highlights

Three months ended September 30, ($ thousands, except per share data)	2019	2018[(1)]	$ change	% change
Annuity/maintenance software licenses	**16,373**	15,111	1,262	8%
Perpetual software licenses	**1,146**	1,172	(26)	-2%
Total revenue	**19,873**	17,941	1,932	11%
Operating profit	**9,343**	7,024	2,319	33%
Net income	**6,868**	5,056	1,812	36%
Earnings per share - basic	**0.09**	0.06	0.03	50%
Funds flow from operations per share - basic	**0.10**	0.07	0.03	43%
Free cash flow per share - basic [(2)]	**0.09**	0.07	0.02	29%

Six months ended September 30, ($ thousands, except per share data)	2019	2018[(1)]	$ change	% change
Annuity/maintenance software licenses	**32,129**	29,826	2,303	8%
Perpetual software licenses	**2,305**	1,498	807	54%
Total revenue	**37,996**	34,646	3,350	10%
Operating profit	**16,411**	12,398	4,013	32%
Net income	**11,310**	9,314	1,996	21%
Earnings per share - basic	**0.14**	0.12	0.02	17%
Funds flow from operations per share - basic	**0.17**	0.14	0.03	21%
Free cash flow per share - basic [(2)]	**0.16**	0.13	0.03	23%

(1) On April 1, 2019, the Company adopted IFRS 16 *Leases* using the modified retrospective approach, by adjusting opening retained earnings with no restatement of comparative figures. As such, comparative information continues to be reported under the previous lease standard.
(2) Non-IFRS financial measures are defined in the "Non-IFRS Financial Measures" section.

Management's Discussion and Analysis

This Management's Discussion and Analysis ("MD&A") for Computer Modelling Group Ltd. ("CMG", the "Company", "we" or "our"), presented as at November 12, 2019, should be read in conjunction with the unaudited condensed consolidated interim financial statements and related notes of the Company for the three and six months ended September 30, 2019 and 2018. Additional information relating to CMG, including our Annual Information Form, can be found at www.sedar.com. The financial data contained herein have been prepared in accordance with International Financial Reporting Standards ("IFRS") and, unless otherwise indicated, all amounts in this report are expressed in Canadian dollars.

Impact of IFRS 16

Effective April 1, 2019, the Company adopted IFRS 16 *Leases*. This new standard replaces IAS 17 and requires the recognition of most leases on the balance sheet. IFRS 16 effectively removes the classification of leases as either finance or operating leases and treats all leases as finance leases for lessees. The Company adopted IFRS 16 using the modified retrospective approach, by adjusting opening retained earnings with no restatement of comparative figures. As such, comparative information continues to be reported under the previous lease standard. Upon IFRS 16 adoption, the Company:

- Recognized lease liability of $43.1 million;
- Recognized right-of-use assets of $39.8 million;
- Recognized the difference between the lease liability and the right-of-use assets in opening retained earnings. Deferred rent liability, which is not required under IFRS 16, and prepaid rent were also reversed against opening retained earnings, for a total impact of $1.1 million.

The adoption of IFRS 16 resulted in a net decrease to operating expenses due to lower rent expense, partially offset by higher depreciation expense on the recognition of right-of-use assets, and an increase to finance costs due to interest expense on the lease liability. Overall, this standard had a negative impact of $0.3 million on the Company's profit before income and other taxes for the six months ended September 30, 2019. Further disclosure is provided in note 3 to the condensed consolidated interim financial statements.

The impact of adopting IFRS 16 on the Company's condensed consolidated interim financial statements is set out below:

Condensed Consolidated Statement of Financial Position

(thousands of $)	September 30, 2019 As reported	Adjustments	September 30, 2019 Balance without IFRS 16 adoption
Assets			
Current assets:			
Cash	47,050	-	47,050
Trade and other receivables	10,353	-	10,353
Prepaid expenses	1,320	34	1,354
Prepaid income taxes	352	-	352
	59,075	34	59,109
Property and equipment	13,891	-	13,891
Right-of-use assets	38,950	(38,950)	-
Deferred tax asset	1,080	(406)	674
Total assets	112,996	(39,322)	73,674
Liabilities and shareholders' equity			
Current liabilities:			
Trade payables and accrued liabilities	4,333	95	4,428
Deferred revenue	23,849		23,849
Lease liability	1,290	(1,290)	-
	29,472	(1,195)	28,277
Lease liability	41,605	(41,605)	-
Deferred rent liability	-	2,025	2,025
Total liabilities	71,077	(40,775)	30,302
Shareholders' equity:			
Share capital	79,851	-	79,851
Contributed surplus	13,209	-	13,209
Deficit	(51,141)	1,453	(49,688)
Total shareholders' equity	41,919	1,453	43,372
Total liabilities and shareholders' equity	112,996	(39,322)	73,674

Condensed Consolidated Statements of Operations and Comprehensive Income

(thousands of $ except per share amounts)	Three months ended September 30, 2019 As reported	Adjustments	Three months ended September 30, 2019 Balance without IFRS 16 adoption
Revenue	19,873	-	19,873
Operating expenses			
Sales, marketing and professional services	4,354	67	4,421
Research and development	4,539	229	4,768
General and administrative	1,637	55	1,692
	10,530	351	10,881
Operating profit	9,343	(351)	8,992
Finance income	541	-	541
Finance costs	(534)	528	(6)
Profit before income and other taxes	9,350	177	9,527
Income and other taxes	2,482	71	2,553
Net and total comprehensive income	6,868	106	6,974
Earnings Per Share			
Basic	0.09	-	0.09
Diluted	0.09	-	0.09

(thousands of $ except per share amounts)	Six months ended September 30, 2019 As reported	Adjustments	Six months ended September 30, 2019 Balance without IFRS 16 adoption
Revenue	37,996	-	37,996
Operating expenses			
Sales, marketing and professional services	8,984	133	9,117
Research and development	9,290	458	9,748
General and administrative	3,311	110	3,421
	21,585	701	22,286
Operating profit	16,411	(701)	15,710
Finance income	644	-	644
Finance costs	(1,266)	1,039	(227)
Profit before income and other taxes	15,789	338	16,127
Income and other taxes	4,479	23	4,502
Net and total comprehensive income	11,310	315	11,625
Earnings Per Share			
Basic	0.14	-	0.14
Diluted	0.14	-	0.14

The Company's actual cash flows are unaffected by IFRS 16. However, the principal reduction portion of lease payments is now classified as financing activities instead of operating activities:

Condensed Consolidated Statement of Cash Flows

(thousands of $)	Three months ended September 30, 2019 As reported	Adjustments	Three months ended September 30, 2019 Balance without IFRS 16 adoption
Net cash provided by operating activities	4,836	(278)	4,558
Net cash used in financing activities	(8,304)	278	(8,026)

(thousands of $)	Six months ended September 30, 2019 As reported	Adjustments	Six months ended September 30, 2019 Balance without IFRS 16 adoption
Net cash provided by operating activities	9,711	(560)	9,151
Net cash used in financing activities	(16,608)	560	(16,048)

Forward-looking Information

Certain information included in this MD&A is forward-looking. Forward-looking information includes statements that are not statements of historical fact and which address activities, events or developments that the Company expects or anticipates will or may occur in the future, including such things as investment objectives and strategy, the development plans and status of the Company's software development projects, the Company's intentions, results of operations, levels of activity, future capital and other expenditures (including the amount, nature and sources of funding thereof), business prospects and opportunities, research and development timetable, and future growth and performance. When used in this MD&A, statements to the effect that the Company or its management "believes", "expects", "expected", "plans", "may", "will", "projects", "anticipates", "estimates", "would", "could", "should", "endeavours", "seeks", "predicts" or "intends" or similar statements, including "potential", "opportunity", "target" or other variations thereof that are not statements of historical fact should be construed as forward-looking information. These statements reflect management's current beliefs with respect to future events and are based on information currently available to management of the Company. The Company believes that the expectations reflected in such forward-looking information are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward-looking information should not be unduly relied upon.

With respect to forward-looking information contained in this MD&A, we have made assumptions regarding, among other things:

- Future software license sales;
- The continued financing by and participation of the Company's CoFlow partner and it being completed in a timely manner;
- Ability to enter into additional software license agreements;
- Ability to continue current research and new product development;
- Ability to recruit and retain qualified staff.

Forward-looking information is not a guarantee of future performance and involves a number of risks and uncertainties, only some of which are described herein. Many factors could cause the Company's actual results, performance or achievements, or future events or developments to differ materially from those expressed or implied by the forward-looking information including, without limitation, the following factors, which are discussed in greater detail in the "Business Risks" section of CMG's MD&A for the year ended March 31, 2019:

- Economic conditions in the oil and gas industry;
- Reliance on key customers;

- Foreign exchange;
- Economic and political risks in countries where the Company currently does or proposes to do business;
- Increased competition;
- Reliance on employees with specialized skills or knowledge;
- Protection of proprietary rights.

Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance or achievement may vary materially from those expressed or implied by the forward-looking information contained in this MD&A. These factors should be carefully considered and readers are cautioned not to place undue reliance on forward-looking information, which speaks only as of the date of this MD&A. All subsequent forward-looking information attributable to the Company herein is expressly qualified in its entirety by the cautionary statements contained in or referred to herein. The Company does not undertake any obligation to release publicly any revisions to forward-looking information contained in this MD&A to reflect events or circumstances that occur after the date of this MD&A or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Corporate Profile

CMG is a computer software technology company serving the oil and gas industry. The Company is a leading supplier of advanced process reservoir modelling software with a blue chip customer base of international oil companies and technology centers in approximately 60 countries. The Company also provides professional services consisting of highly specialized support, consulting, training, and contract research activities. CMG has sales and technical support services based in Calgary, Houston, London, Dubai, Bogota and Kuala Lumpur. CMG's Common Shares are listed on the Toronto Stock Exchange ("TSX") and trade under the symbol "CMG".

Quarterly Performance

	Fiscal 2018[1][2]		Fiscal 2019[1][3]				**Fiscal 2020[4]**	
($ thousands, unless otherwise stated)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	**Q2**
Annuity/maintenance licenses	16,158	15,664	14,715	15,111	17,240	16,734	15,756	**16,373**
Perpetual licenses	743	2,053	326	1,172	611	2,891	1,159	**1,146**
Software licenses	16,901	17,717	15,041	16,283	17,851	19,625	16,915	**17,519**
Professional services	1,418	1,677	1,664	1,658	1,222	1,513	1,208	**2,354**
Total revenue	18,319	19,394	16,705	17,941	19,073	21,138	18,123	**19,873**
Operating profit	6,908	7,529	5,374	7,024	8,406	8,750	7,068	**9,343**
Operating profit (%)	38	39	32	39	44	41	39	**47**
Profit before income and other taxes	7,151	8,547	5,980	7,104	9,406	8,400	6,439	**9,350**
Income and other taxes	2,054	2,401	1,722	2,048	2,559	2,426	1,997	**2,482**
Net income for the period	5,097	6,146	4,258	5,056	6,847	5,974	4,442	**6,868**
EBITDA[5]	7,400	8,090	5,837	7,505	8,915	9,250	8,118	**10,426**
Cash dividends declared and paid	8,022	8,021	8,021	8,024	8,022	8,023	8,022	**8,026**
Funds flow from operations	6,225	7,285	5,242	5,777	7,550	7,024	6,097	**7,787**
Free cash flow[5]	5,595	6,904	4,909	5,697	7,297	6,948	5,707	**7,274**
Per share amounts - ($/share)								
Earnings per share - basic	0.06	0.08	0.05	0.06	0.09	0.07	0.06	**0.09**
Earnings per share - diluted	0.06	0.08	0.05	0.06	0.09	0.07	0.06	**0.09**
Cash dividends declared and paid	0.10	0.10	0.10	0.10	0.10	0.10	0.10	**0.10**
Funds flow from operations per share - basic	0.08	0.09	0.07	0.07	0.09	0.09	0.08	**0.10**
Free cash flow per share - basic[5]	0.07	0.09	0.06	0.07	0.09	0.09	0.07	**0.09**

(1) On April 1, 2019, the Company adopted IFRS 16 *Leases* using the modified retrospective approach, by adjusting opening retained earnings with no restatement of comparative figures. As such, comparative information continues to be reported under the previous lease standard.
(2) Q3, and Q4 of fiscal 2018 include $0.6 million and $1.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(3) Q1, Q2, Q3 and Q4 of fiscal 2019 include $0.1 million, $0.3 million, $2.3 million and $1.8 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(4) Q1 and Q2 of fiscal 2020 includes $0.2 million and $0.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.
(5) Non-IFRS financial measures are defined in the "Non-IFRS Financial Measures" section.

Highlights

During the three months / ***During the six months***

ended September 30, 2019, compared to the same period of the previous fiscal year:

During the three months

- Annuity/maintenance license revenue increased by 8%;
- Total software license revenue increased by 8%;
- Net income increased by 36% (without the negative impact of IFRS 16 adoption, net income increased by 38%);
- EBITDA increased by 39% (without the positive impact of IFRS 16 adoption, EBITDA increased by 26%).

During the six months

- Annuity/maintenance license revenue increased by 8%;
- Total software license revenue increased by 10%;
- Net income increased by 21% (without the negative impact of IFRS 16 adoption, net income increased by 25%);
- EBITDA increased by 39% (without the positive impact of IFRS 16 adoption, EBITDA increased by 25%).

During the three months
ended September 30, 2019, CMG:

- Realized basic EPS of $0.09;
- Achieved free cash flow per share of $0.09;
- Declared and paid a dividend of $0.10 per share.

During the six months
ended September 30, 2019, CMG:

- Realized basic EPS of $0.14;
- Achieved free cash flow per share of $0.16;
- Declared and paid dividends of $0.20 per share.

Revenue

Three months ended September 30, ($ thousands)	2019	2018	$ change	% change
Software license revenue	**17,519**	16,283	1,236	8%
Professional services	**2,354**	1,658	696	42%
Total revenue	**19,873**	17,941	1,932	11%
Software license revenue as a % of total revenue	**88%**	91%		
Professional services as a % of total revenue	**12%**	9%		

Six months ended September 30, ($ thousands)	2019	2018	$ change	% change
Software license revenue	**34,434**	31,324	3,110	10%
Professional services	**3,562**	3,322	240	7%
Total revenue	**37,996**	34,646	3,350	10%
Software license revenue as a % of total revenue	**91%**	90%		
Professional services as a % of total revenue	**9%**	10%		

CMG's revenue is comprised of software license sales, which provide the majority of the Company's revenue, and fees for professional services.

Total revenue for the three and six months ended September 30, 2019 increased by 11% and 10%, respectively, compared to the same periods of the previous fiscal year, due to increases in both software license revenue and professional services revenue.

Software License Revenue

Software license revenue is made up of annuity/maintenance license fees charged for the use of the Company's software products, which is generally for a term of one year or less, and perpetual software license sales, whereby the customer purchases the-then-current version of the software and has the right to use that version in perpetuity. Annuity/maintenance license fees have historically had a high renewal rate and, accordingly, provide a reliable revenue stream, while perpetual license sales are more variable and unpredictable in nature as the purchase decision and its timing fluctuate with the customers' needs and budgets. The majority of CMG's customers who have acquired perpetual software licenses subsequently purchase our maintenance package to ensure ongoing product support and access to current versions of CMG's software.

Three months ended September 30, ($ thousands)	2019	2018	$ change	% change
Annuity/maintenance license revenue	**16,373**	15,111	1,262	8%
Perpetual license revenue	**1,146**	1,172	(26)	-2%
Total software license revenue	**17,519**	16,283	1,236	8%
Annuity/maintenance as a % of total software license revenue	**93%**	93%		
Perpetual as a % of total software license revenue	**7%**	7%		

Six months ended September 30, ($ thousands)	2019	2018	$ change	% change
Annuity/maintenance license revenue	**32,129**	29,826	2,303	8%
Perpetual license revenue	**2,305**	1,498	807	54%
Total software license revenue	**34,434**	31,324	3,110	10%
Annuity/maintenance as a % of total software license revenue	**93%**	95%		
Perpetual as a % of total software license revenue	**7%**	5%		

Total software license revenue for the three months ended September 30, 2019 increased by 8% compared to the same period of the previous fiscal year, due to an increase in annuity/maintenance license revenue.

Total software license revenue for the six months ended September 30, 2019 increased by 10% compared to the same period of the previous fiscal year, due to increases in both annuity/maintenance license revenue and perpetual license revenue.

CMG's annuity/maintenance license revenue increased by 8% during the three and six months ended September 30, 2019, compared to the same periods of the previous fiscal year, due to increased licensing by existing and new customers. In addition, the movement in the CAD/USD exchange rate had a positive impact on annuity/maintenance license revenue in the current quarter and year to date.

Perpetual license revenue for the three months ended September was comparable to the same period of the previous fiscal year, as increased perpetual sales in the Eastern Hemisphere were offset by decreases in Canada and the United States. Perpetual license revenue increased by 54% during the six months ended September 30, 2019 because most regions, excluding Canada, had higher perpetual license sales than in the comparative period. Software licensing under perpetual sales may fluctuate significantly between periods due to the uncertainty associated with the timing and the location where sales are generated. For this reason, even though we expect to achieve a certain level of aggregate perpetual sales on an annual basis, we expect to observe fluctuations in the quarterly perpetual revenue amounts throughout the fiscal year. In our experience, the majority of perpetual sales are generated in South America and the Eastern Hemisphere, as North American customers prefer annuity leases over perpetual purchases.

We can observe from the tables below that the exchange rate between the US and Canadian dollars during the three and six months ended September 30, 2019 had a positive impact on reported software license revenue, compared to the same periods of the previous fiscal year.

The following table summarizes the US dollar-denominated revenue and the weighted average exchange rate at which it was converted to Canadian dollars:

Three months ended September 30, ($ thousands)		2019	2018	$ change	% change
US dollar annuity/maintenance license revenue	**US$**	**9,642**	9,353	289	3%
Weighted average conversion rate		**1.336**	1.278		
Canadian dollar equivalent	**CDN$**	**12,883**	11,950	933	8%
US dollar perpetual license revenue	**US$**	**869**	898	(29)	-3%
Weighted average conversion rate		**1.320**	1.305		
Canadian dollar equivalent	**CDN$**	**1,146**	1,172	(26)	-2%

Six months ended September 30, ($ thousands)		2019	2018	$ change	% change
US dollar annuity/maintenance license revenue	US$	**18,928**	18,323	605	3%
Weighted average conversion rate		**1.336**	1.277		
Canadian dollar equivalent	CDN$	**25,281**	23,390	1,891	8%
US dollar perpetual license revenue	US$	**1,729**	1,151	578	50%
Weighted average conversion rate		**1.333**	1.302		
Canadian dollar equivalent	CDN$	**2,305**	1,498	807	54%

The following table quantifies the foreign exchange impact on our software license revenue:

Three months ended September 30, ($ thousands)	2018	Incremental License Growth	Foreign Exchange Impact	2019
Annuity/maintenance license revenue	15,111	698	564	**16,373**
Perpetual license revenue	1,172	(39)	13	**1,146**
Total software license revenue	16,283	659	577	**17,519**

Six months ended September 30, ($ thousands)	2018	Incremental License Growth	Foreign Exchange Impact	2019
Annuity/maintenance license revenue	29,826	1,184	1,119	**32,129**
Perpetual license revenue	1,498	753	54	**2,305**
Total software license revenue	31,324	1,937	1,173	**34,434**

Software Revenue by Geographic Segment

Three months ended September 30, ($ thousands)	2019	2018	$ change	% change
Annuity/maintenance license revenue				
Canada	**3,927**	3,792	135	4%
United States	**5,050**	4,626	424	9%
South America	**1,971**	1,732	239	14%
Eastern Hemisphere(1)	**5,425**	4,961	464	9%
	16,373	15,111	1,262	8%
Perpetual license revenue				
Canada	**-**	156	(156)	-100%
United States	**-**	152	(152)	-100%
South America	**-**	-	-	0%
Eastern Hemisphere	**1,146**	864	282	33%
	1,146	1,172	(26)	-2%
Total software license revenue				
Canada	**3,927**	3,948	(21)	-1%
United States	**5,050**	4,778	272	6%
South America	**1,971**	1,732	239	14%
Eastern Hemisphere	**6,571**	5,825	746	13%
	17,519	16,283	1,236	8%

Six months ended September 30, ($ thousands)	**2019**	2018	$ change	% change
Annuity/maintenance license revenue				
Canada	**7,703**	7,659	44	1%
United States	**9,984**	9,179	805	9%
South America	**3,916**	3,413	503	15%
Eastern Hemisphere[1]	**10,526**	9,575	951	10%
	32,129	29,826	2,303	8%
Perpetual license revenue				
Canada	**-**	156	(156)	-100%
United States	**298**	152	146	96%
South America	**769**	-	769	100%
Eastern Hemisphere	**1,238**	1,190	48	4%
	2,305	1,498	807	54%
Total software license revenue				
Canada	**7,703**	7,815	(112)	-1%
United States	**10,282**	9,331	951	10%
South America	**4,685**	3,413	1,272	37%
Eastern Hemisphere	**11,764**	10,765	999	9%
	34,434	31,324	3,110	10%

(1) Includes Europe, Africa, Asia and Australia.

During the three and six months ended September 30, 2019, total software license revenue increased in all regions (with the exception of Canada, where we experienced a small 1% decrease), compared to the same periods of the previous fiscal year.

The Canadian region (representing 22% of year-to-date software license revenue) experienced increases of 4% and 1% in annuity/maintenance license revenue during the three and six months ended September 30, 2019, respectively, compared to the same periods of the previous fiscal year, due to an increase in licensing by existing customers. No perpetual sales were realized in Canada during the three and six months ended September 30, 2019.

The United States (representing 30% of year-to-date software license revenue) experienced a 9% increase in annuity/maintenance license revenue during the three and six months ended September 30, 2019, compared to the same periods of the previous fiscal year, due to increased licensing by both existing and new customers. A small portion of the year-to-date increase was due to increased usage of our cloud-based offerings, as the number of customers who access our software via the cloud has been growing since it was introduced at the beginning of fiscal 2019. There were no perpetual sales in the United States during the current three-month period, and perpetual sales during the current six-month period were higher than in the comparative period.

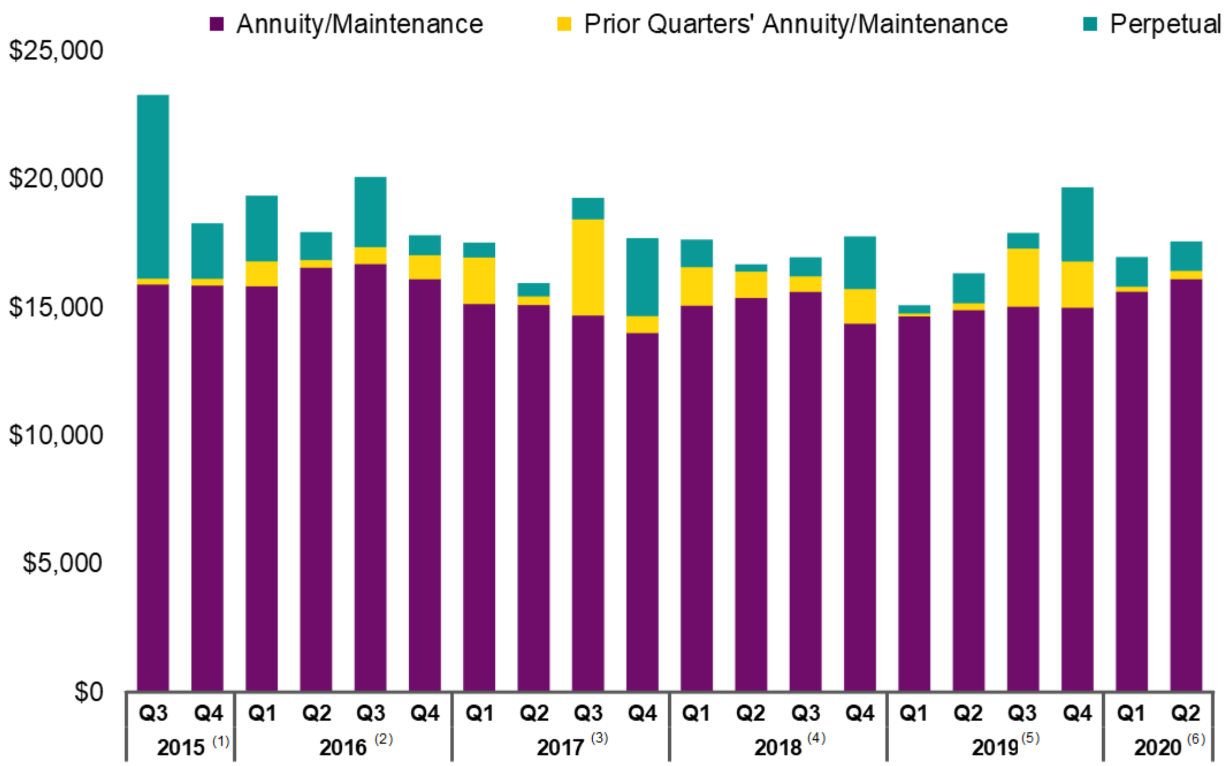
South America (representing 14% of year-to-date software license revenue) experienced increases of 14% and 15% in annuity/maintenance license revenue during the three and six months ended September 30, 2019, respectively, compared to the same periods of the previous fiscal year, mainly due to increased licensing by existing customers. Perpetual license revenue in South America was higher in the current year-to-date period than in the comparative period as a result of sales made in the first quarter of fiscal 2020.

The Eastern Hemisphere (representing 34% of year-to-date software license revenue) experienced increases of 9% and 10% in annuity/maintenance license revenue during the three and six months ended September 30, 2019, respectively, compared to the same periods of the previous fiscal year, due to a combination of increased licensing by existing customers and the addition of new customers. Perpetual license revenue increased by 33% and 4% during the three and six months ended September 30, 2019, respectively, as a result of higher perpetual sales in Asia in the current quarter.

As footnoted in the Quarterly Performance table, in the normal course of business CMG may complete the negotiation of certain annuity/maintenance contracts and/or fulfill revenue recognition requirements within a current quarter that includes usage of CMG's products in prior quarters. This situation particularly affects contracts negotiated with countries that face increased economic and political risks leading to the revenue recognition criteria being satisfied only at the time of the receipt of cash. The dollar magnitude of such contracts may be significant to the quarterly comparatives of our annuity/maintenance license revenue stream. To provide a normalized comparison, we specifically identify the revenue component where revenue recognition is satisfied in the current period for products provided in previous quarters. Please refer to the yellow bars and the footnotes in the graph below:

Quarterly Software License Revenue

($ thousands)



(1) Q3 and Q4 of fiscal 2015 include $0.2 million, and $0.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(2) Q1, Q2, Q3 and Q4 of fiscal 2016 include $1.0 million, $0.3 million, $0.7 million, and $0.9 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(3) Q1, Q2, Q3 and Q4 of fiscal 2017 include $1.8 million, $0.3 million, $3.7 million, and $0.7 million , respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(4) Q1, Q2, Q3 and Q4 of fiscal 2018 include $1.5 million, $1.0 million, $0.6 million, and $1.3 million , respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(5) Q1, Q2, Q3 and Q4 of fiscal 2019 include $0.1 million, $0.3 million, $2.3 million, and $1.8 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

(6) Q1 and Q2 of fiscal 2020 includes $0.2 million and $0.3 million, respectively, in revenue that pertains to usage of CMG's products in prior quarters.

Deferred Revenue

($ thousands)	**Fiscal 2020**	Fiscal 2019	Fiscal 2018	$ change	% change
Deferred revenue at:					
Q1 (June 30)	**29,266**	29,350 (2)		(84)	0%
Q2 (September 30)	**23,849**	23,222 (3)		627	3%
Q3 (December 31)		13,782	17,785	(4,003)	-23%
Q4 (March 31)		35,015 (4)	34,362 (1)	653	2%

(1) Includes current deferred revenue of $33.4 million and long-term deferred revenue of $1.0 million.
(2) Includes current deferred revenue of $28.8 million and long-term deferred revenue of $0.6 million.
(3) Includes current deferred revenue of $22.9 million and long-term deferred revenue of $0.3 million.
(4) Includes current deferred revenue of $34.7 million and long-term deferred revenue of $0.3 million.

CMG's deferred revenue consists primarily of amounts for pre-sold licenses. With the exception of certain term-based software licenses that are recognized at the start of the license period, our annuity/maintenance revenue is deferred and recognized ratably over the license period, which is generally one year or less. Amounts are deferred for licenses that have been provided and revenue recognition reflects the passage of time.

The above table illustrates the normal trend in the deferred revenue balance from the beginning of the calendar year (which corresponds with Q4 of our fiscal year), when most renewals occur, to the end of the calendar year (which corresponds with Q3 of our fiscal year). Our fourth quarter corresponds with the beginning of the fiscal year for most oil and gas companies, representing a time when they enter a new budget year and sign/renew their contracts.

Deferred revenue as at the end of Q2 of fiscal 2020 increased by 3% compared to Q2 of fiscal 2019 due to a combination of factors, not including the timing of license renewals.

Professional Services Revenue

Professional services revenue was $2.4 million and $3.6 million for the three and six months ended September 30, 2019, respectively, up by $0.7 million and $0.2 million from the same periods of the previous fiscal year. The increase was due to the amendment to the CoFlow agreement with Shell Global Solutions International B.V. ("Shell"), pursuant to which CMG received development funding for additional resources allocated to CoFlow development and support in the current and previous quarters (see "Commitments, Off Balance Sheet Items and Transactions with Related Parties"), This increase was partially offset by lower consulting revenue due to lower customer project activity.

Professional services revenue consists of specialized consulting, training, and contract research activities. CMG performs consulting and contract research activities on an ongoing basis, but such activities are not considered to be a core part of our business and are primarily undertaken to increase our knowledge base and hence expand the technological abilities of our simulators in a funded manner, combined with servicing our customers' needs. In addition, these activities are undertaken to market the capabilities of our suite of software products with the ultimate objective to increase software license sales. Our experience is that consulting activities are variable in nature as both the timing and dollar magnitude of work are dependent on activities and budgets within customer companies.

To facilitate analysis and year-over-year comparison, current fiscal year's metrics and ratios affected by IFRS 16 have been presented under both IFRS 16 and the previous lease standard in the following sections.

Expenses

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Sales, marketing and professional services	4,421	(67)	**4,354**	4,378	(24)	-1%
Research and development	4,768	(229)	**4,539**	4,862	(323)	-7%
General and administrative	1,692	(55)	**1,637**	1,677	(40)	-2%
Total operating expenses	10,881	(351)	**10,530**	10,917	(387)	-4%
Direct employee costs(1)	7,886	-	**7,886**	7,802	84	1%
Other corporate costs	2,995	(351)	**2,644**	3,115	(471)	-15%
	10,881	(351)	**10,530**	10,917	(387)	-4%

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Sales, marketing and professional services	9,117	(133)	**8,984**	9,365	(381)	-4%
Research and development	9,748	(458)	**9,290**	9,637	(347)	-4%
General and administrative	3,421	(110)	**3,311**	3,246	65	2%
Total operating expenses	22,286	(701)	**21,585**	22,248	(663)	-3%
Direct employee costs(1)	16,550	-	**16,550**	16,517	33	0%
Other corporate costs	5,736	(701)	**5,035**	5,731	(696)	-12%
	22,286	(701)	**21,585**	22,248	(663)	-3%

(1) Includes salaries, bonuses, stock-based compensation, benefits, commissions, and professional development. See "Non-IFRS Financial Measures".

Prior to applying IFRS 16, total operating expenses for the three and six months ended September 30, 2019 remained consistent with the same periods of the previous fiscal year.

The application of IFRS 16 decreased total operating expenses by $0.4 million in the three-month period and by $0.7 million in the six-month period ended September 30. This net decrease is a combination of lower rent expense (because under IFRS 16 rent payments are classified as finance costs and repayment of lease liability), partially offset by higher depreciation expense on the recognition of right-of-use assets.

Direct Employee Costs

As a technology company, CMG's largest area of expenditure is its people. Approximately 77% of the total operating expenses for the three months ended September 30, 2019 related to direct employee costs. Staffing levels in the current fiscal year were slightly higher compared to the previous fiscal year. At September 30, 2019, CMG's full-time equivalent staff complement was 187 employees and consultants, down from 191 full-time equivalent employees and consultants at September 30, 2018. Direct employee costs for the three and six months ended September 30, 2019 remained consistent compared to the same periods of the previous fiscal year.

Other Corporate Costs

Prior to the application of IFRS 16, other corporate costs for the three months ended September 30, 2019 decreased slightly by 4%, mainly due to lower office costs and a higher SR&ED credit. Prior to the application of IFRS 16, other corporate costs for the six months ended September 30, 2019 remained consistent with the same period of the previous fiscal year.

Research and Development

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Research and development (gross)	5,199	(229)	**4,970**	5,239	(269)	-5%
SR&ED credits	(431)	-	**(431)**	(377)	(54)	14%
Research and development	4,768	(229)	**4,539**	4,862	(323)	-7%
Research and development as a % of total revenue	24%		**23%**	27%		

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Research and development (gross)	10,620	(458)	**10,162**	10,424	(262)	-3%
SR&ED credits	(872)	-	**(872)**	(787)	(85)	11%
Research and development	9,748	(458)	**9,290**	9,637	(347)	-4%
Research and development as a % of total revenue	26%		**24%**	28%		

CMG maintains a belief that its strategy of growing long-term value for shareholders can only be achieved through continued investment in research and development. CMG works closely with its customers to provide solutions to complex problems related to proven and new advanced recovery processes.

The above research and development costs include $1.6 million and $3.3 million of costs for CoFlow for the three and six months ended September 30, 2019, respectively (2018 – $1.9 million and $3.8 million). See discussion under "Commitments, Off Balance Sheet Items and Transactions with Related Parties".

Prior to applying IFRS 16, research and development costs for the three months ended September 30, 2019 remained consistent with the same period of the previous fiscal year.

Prior to applying IFRS 16, research and development costs for the six months ended September 30, 2019 increased slightly by 2%.

The application of IFRS 16 decreased research and development costs by $0.2 million in the three-month period and by $0.5 million in the six-month period ended September 30, 2019. This net decrease is a combination of lower rent expense (because under IFRS 16 rent payments are classified as finance costs and repayment of lease liability), partially offset by higher depreciation expense on the recognition of right-of-use assets.

SR&ED credits increased by 14% and 11% for the three and six months ended September 30, 2019, compared to the same periods of the previous fiscal year, mainly due to an increase in hours spent on SR&ED-eligible projects.

Research and development costs as a percentage of total revenue decreased to 23% and 24% for the three and six months ended September 30, 2019, respectively, compared to 27% and 28% in the comparative periods, as a result of higher revenue and lower expenses under IFRS 16.

Depreciation

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Depreciation of property and equipment, allocated to:						
Sales, marketing and professional services	118	158	**276**	113	163	144%
Research and development	314	353	**667**	310	357	115%
General and administrative	56	84	**140**	58	82	141%
Total depreciation	488	595	**1,083**	481	602	125%

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Depreciation of property and equipment, allocated to:						
Sales, marketing and professional services	231	304	**535**	218	317	145%
Research and development	613	706	**1,319**	612	707	116%
General and administrative	111	168	**279**	114	165	145%
Total depreciation	955	1,178	**2,133**	944	1,189	126%

Depreciation increased by 125% and 126% in the three and six months ended September 30, 2019 due to the additional depreciation associated with the right-of-use assets recognized under IFRS 16.

Finance Income and Costs

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Interest income	321	-	**321**	312	9	3%
Net foreign exchange gain	220	-	**220**	-	220	100%
Total finance income	541	-	**541**	312	229	73%
Interest expense on lease liability	-	(534)	**(534)**	-	(534)	-100%
Net foreign exchange loss	(6)	6	**-**	(232)	232	-100%
Total finance costs	(6)	(528)	**(534)**	(232)	(302)	130%

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Interest income	644	-	**644**	615	29	5%
Net foreign exchange gain	-	-	**-**	71	(71)	-100%
Total finance income	644	-	**644**	686	(42)	-6%
Interest expense on lease liability	-	(1,068)	**(1,068)**	-	(1,068)	-100%
Net foreign exchange loss	(227)	29	**(198)**	-	(198)	-100%
Total finance costs	(227)	(1,039)	**(1,266)**	-	(1,266)	-100%

Interest income for the three and six months ended September 30, 2019 was slightly higher compared to the same periods of the previous fiscal year. Interest expense on lease liability is the result of the adoption of IFRS 16, as explained earlier.

CMG is impacted by foreign exchange fluctuations as approximately 74% of CMG's revenue for the six months ended September 30, 2019 (2018 – 75%) is denominated in US dollars, whereas only approximately 24% (2018 – 26%) of CMG's total costs are denominated in US dollars.

The following chart shows the exchange rates used to translate CMG's US dollar-denominated working capital at September 30, 2019, 2018 and 2017 and the average exchange rates used to translate income statement items during the six months ended September 30, 2019, 2018 and 2017:

CDN$ to US$	At June 30	At September 30	Six month trailing average
2017	0.7706	0.8013	0.7654
2018	0.7594	0.7725	0.7701
2019	**0.7641**	**0.7551**	**0.7516**

For the three months ended September 30, 2019, CMG recorded a net foreign exchange gain of $0.2 million due to a strengthening of the US dollar, which positively affected the valuation of the US-dollar denominated portion of the Company's working capital.

For the six months ended September 30, 2019, CMG recorded a net foreign exchange loss of $0.2 million due to a weakening of the US dollar, which negatively affected the valuation of the US-dollar denominated portion of the Company's working capital.

Income and Other Taxes

CMG's effective tax rate for the six months ended September 30, 2019 is 28.3% (2018 – 28.8%), whereas the blended Canadian statutory tax rate for the Company's 2020 fiscal year is 26.0% (decreased from 27.0% in fiscal 2019, with further rate reductions legislated over the next two years). This difference between the effective rate and the statutory rate is primarily due to revaluing CMG's deferred tax assets at the lower tax rate and the non-tax deductibility of stock-based compensation expense.

The benefit recorded in CMG's books on the scientific research and experimental development ("SR&ED") investment tax credit program impacts deferred income taxes. The investment tax credit earned in the current fiscal year is utilized by CMG to reduce income taxes otherwise payable for the current fiscal year and the federal portion of this benefit bears an inherent tax liability as the amount of the credit is included in the subsequent year's taxable income for both federal and provincial purposes. The inherent tax liability on these investment tax credits is reflected in the year the credit is earned as a non-current deferred tax liability and then, in the following fiscal year, is transferred to income taxes payable.

Operating Profit and Net Income

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Total revenue	19,873	-	**19,873**	17,941	1,932	11%
Operating expenses	(10,881)	351	**(10,530)**	(10,917)	387	-4%
Operating profit	8,992	351	**9,343**	7,024	2,319	33%
Operating profit as a % of revenue	45%		**47%**	39%		
Net income for the period	6,974	(106)	**6,868**	5,056	1,812	36%
Net income as a % of total revenue	35%		**35%**	28%		
Basic earnings per share ($/share)	0.09	-	**0.09**	0.06	0.03	50%

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Total revenue	37,996	-	**37,996**	34,646	3,350	10%
Operating expenses	(22,286)	701	**(21,585)**	(22,248)	663	-3%
Operating profit	15,710	701	**16,411**	12,398	4,013	32%
Operating profit as a % of revenue	41%		**43%**	36%		
Net income for the period	11,625	(315)	**11,310**	9,314	1,996	21%
Net income as a % of total revenue	31%		**30%**	27%		
Basic earnings per share ($/share)	0.14	-	**0.14**	0.12	0.02	17%

Prior to applying IFRS 16, operating profit as a percentage of total revenue was 45% and 41% for the three and six months ended September 30, 2019, respectively, up from 39% and 36% in the comparative periods, due to higher revenue. Under IFRS 16, operating profit as a percentage of total revenue was 47% and 43%, for the three and six months ended September 30, 2019, respectively, because the adoption of IFRS 16 resulted in lower operating expenses.

Net income as a percentage of total revenue was 35% and 30% for the three and six months ended September 30, 2019, respectively, an increase compared to 28% and 27% in the comparative periods, mainly due to higher revenue. The adoption of IFRS 16 had a nominal impact on net income as a percentage of revenue.

EBITDA(1)

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Net income for the period	6,974	(106)	**6,868**	5,056	1,812	36%
Add (deduct):						
Depreciation	488	595	**1,083**	481	602	125%
Finance (income) costs	(535)	528	**(7)**	(80)	73	-91%
Income and other taxes	2,553	(71)	**2,482**	2,048	434	21%
EBITDA	9,480	946	**10,426**	7,505	2,921	39%
EBITDA as a % of total revenue	48%		**52%**	42%		

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Net income for the period	11,625	(315)	**11,310**	9,314	1,996	21%
Add (deduct):						
Depreciation	955	1,178	**2,133**	944	1,189	126%
Finance (income) costs	(417)	1,039	**622**	(686)	1,308	-191%
Income and other taxes	4,502	(23)	**4,479**	3,770	709	19%
EBITDA	16,665	1,879	**18,544**	13,342	5,202	39%
EBITDA as a % of total revenue	44%		**49%**	39%		

(1) Non-IFRS financial measures are defined in the "Non-IFRS Financial Measures" section.

Prior to applying IFRS 16, EBITDA as a percentage of total revenue for the three and six months ended September 30, 2019 was 48% and 44%, respectively, up from 42% and 39% in the same periods of the previous fiscal year, due to higher revenue.

Under IFRS 16, EBITDA increased to 52% and 49% for the three and six months ended September 30, 2019, respectively, because rent payments (which used to be included in EBITDA as rent expense) are now recorded as finance costs and repayment of lease liability (both of which are excluded from the calculation of EBITDA).

Liquidity and Capital Resources

Three months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Cash, beginning of period	50,753	-	**50,753**	60,081	(9,328)	-16%
Cash flow provided by (used in):						
Operating activities	4,558	278	**4,836**	277	4,559	1646%
Financing activities	(8,026)	(278)	**(8,304)**	(8,007)	(297)	-4%
Investing activities	(235)	-	**(235)**	(80)	(155)	-194%
Cash, end of period	47,050	-	**47,050**	52,271	(5,221)	-10%

Six months ended September 30, ($ thousands, except per share data)	Previous lease standard 2019	IFRS 16 impact	**IFRS 16 2019**	2018	$ change	% change
Cash, beginning of period	54,290	-	**54,290**	63,719	(9,429)	-15%
Cash flow provided by (used in):						
Operating activities	9,151	560	**9,711**	4,993	4,718	94%
Financing activities	(16,048)	(560)	**(16,608)**	(16,028)	(580)	-4%
Investing activities	(343)	-	**(343)**	(413)	70	17%
Cash, end of period	47,050	-	**47,050**	52,271	(5,221)	-10%

At September 30, 2019, CMG had $47.1 million in cash, no borrowings and access to approximately $1.1 million under a line of credit with its principal banker. The Company's primary non-operating use of cash is for paying dividends. Management believes that the Company has sufficient capital resources to meet its operating and planned capital expenditure needs.

During the six months ended September 30, 2019, 13.9 million shares of CMG's public float were traded on the TSX. As at September 30, 2019, CMG's market capitalization based upon its September 30, 2019 closing price of $6.11 was $490.3 million.

Operating Activities

Prior to applying IFRS 16, cash flow from operating activities increased by $4.3 million and $4.2 million in the three and six months ended September 30, 2019, respectively, compared to the same periods of the previous fiscal year. This was due to higher revenue and the positive impact of the timing difference of when sales are made and when the resulting receivables are collected. The application of IFRS 16 increased cash flow from operating activities for the three and six months ended September 30, 2019 by $0.3 million and $0.6 million, respectively, because the principal reduction portion of lease payments is classified as financing activities under IFRS 16 versus operating activities under the old standard.

Financing Activities

Prior to applying IFRS 16, cash used in financing activities has not changed in the three and six months ended September 30, 2019, compared to the same periods of the previous fiscal year. The application of IFRS 16 increased cash used in financing activities for the three and six months ended September 30, 2019 by $0.3 million and $0.6 million, respectively, because the principal reduction portion of lease payments is classified as financing activities under IFRS 16 versus operating activities under the old standard.

In the six months ended September 30, 2019, CMG paid $16.0 million in dividends, representing the following quarterly dividends:

($ per share)	Q1	Q2
Total dividends declared and paid	0.10	0.10

In the six months ended September 30, 2018 CMG paid $16.0 million in dividends, representing the following quarterly dividends:

($ per share)	Q1	Q2
Total dividends declared and paid	0.10	0.10

On November 12, 2019, CMG announced the payment of a quarterly dividend of $0.10 per share on CMG's Common Shares. The dividend will be paid on December 13, 2019 to shareholders of record at the close of business on December 5, 2019. Based on our expectation of profitability and cash-generating ability, we are cautiously optimistic that the Company will continue to pay quarterly dividends.

Investing Activities

CMG's current needs for capital asset investment relate to office infrastructure costs and computer equipment, all of which are being funded internally. During the six months ended September 30, 2019, CMG's cash expenditures on property and equipment were $0.3 million, primarily composed of computing equipment. CMG's capital budget for fiscal 2020 is $1.5 million.

Commitments, Off Balance Sheet Items and Transactions with Related Parties

CMG, in partnership with Shell currently and historically also with Petroleo Brasileiro S.A., is the developer of CoFlow, the newest generation of reservoir and production system simulation software. Under a five-year agreement entered into by Shell and CMG on January 1, 2017 (the "CoFlow Agreement"), CMG is responsible for the research and development costs of CoFlow (estimated to be $8.2 million in fiscal 2020), while Shell provides a fixed fee contribution for the continuing development of the software (estimated to be $4.0 million in fiscal 2020). CMG plans to continue funding CoFlow research and development costs from internally generated cash flows.

In July of 2019, CMG and Shell signed an amendment to the CoFlow Agreement. In order to achieve specific development targets and deployments across a broader range of Shell's assets, CMG will allocate more resources to CoFlow over the next two years, while Shell will increase its financial contribution accordingly. The cost of additional resources allocated to CoFlow is expected to be in the range of $4.5 – $6.5 million on an annualized basis by the end of fiscal 2020.

CMG has very little in the way of other ongoing material contractual obligations other than pre-sold licenses, which are reflected as deferred revenue on the statement of financial position, and contractual obligations for office leases, which are estimated to be as follows as at September 30, 2019:

(thousands of $)	Undiscounted lease liability payments	Operating costs and short-term leases	Total commitments
Less than one year	3,390	1,161	4,551
Between one and five years	14,126	4,659	18,785
More than five years	48,068	15,266	63,334
	65,584	21,086	86,670

Business Risks and Critical Accounting Estimates

These remain unchanged from the factors detailed in CMG's 2019 Financial Report.

Outstanding Share Data

The following table represents the number of Common Shares, stock options, restricted share units and performance share units outstanding:

As at November 12, 2019 (thousands)	
Common Shares	80,249
Stock options	3,916
Restricted share units(1)	377
Performance share units(1)	21

(1) Upon vesting, restricted share units and performance share units can be exchanged for Common Shares of the Company or surrendered for cash.

The maximum number of Common Shares that may be reserved for issuance under the Company's security-based compensation plans is limited to 10% of the issued and outstanding Common Shares. Based on this calculation, at November 12, 2019, CMG could reserve up to 8,024,000 Common Shares for issuance under its security-based compensation plans.

Disclosure Controls and Procedures and Internal Control over Financial Reporting

Management is responsible for establishing and maintaining disclosure controls and procedures ("DC&P") and internal control over financial reporting ("ICFR") as defined under National Instrument 52-109. These controls and procedures were reviewed and the effectiveness of their design and operation was evaluated in fiscal 2019 in accordance with the COSO control framework (2013). The evaluation confirmed the effectiveness of DC&P and ICFR at March 31, 2019. During the 2020 fiscal year, we continue to monitor and review our controls and procedures. During the three months ended September 30, 2019, there have been no significant changes to the Company's ICFR that have materially affected, or are reasonably likely to materially affect, the Company's ICFR.

Additional IFRS Measure

Funds flow from operations is an additional IFRS measure that the Company presents in its consolidated statements of cash flows. Funds flow from operations is calculated as cash flows provided by operating activities adjusted for changes in non-cash working capital. Management believes that this measure provides useful supplemental information about operating performance and liquidity, as it represents cash generated during the period, regardless of the timing of collection of receivables and payment of payables, which may reduce comparability between periods.

Non-IFRS Financial Measures

Certain financial measures in this MD&A – namely, direct employee costs, other corporate costs, EBITDA and free cash flow – do not have a standard meaning prescribed by IFRS and, accordingly, may not be comparable to measures used by other companies. Management believes that these indicators nevertheless provide useful measures in evaluating the Company's performance.

Direct employee costs include salaries, bonuses, stock-based compensation, benefits, commission expenses, and professional development. Other corporate costs include facility-related expenses, corporate reporting, professional services, marketing and promotion, computer expenses, travel, and other office-related expenses. Direct employee costs and other corporate costs should not be considered an alternative to total operating expenses as determined in accordance with IFRS. People-related costs represent the Company's largest area of expenditure; hence, management considers highlighting separately corporate and people-related costs to be important in evaluating the quantitative impact of cost management of these two major expenditure pools. See "Expenses" heading for a reconciliation of direct employee costs and other corporate costs to total operating expenses.

EBITDA refers to net income before adjusting for depreciation expense, finance income, finance costs, and income and other taxes. EBITDA should not be construed as an alternative to net income as determined by IFRS. The Company believes that EBITDA is useful supplemental information as it provides an indication of the results generated by the Company's main business activities prior to consideration of how those activities are amortized, financed or taxed. See "EBITDA" heading for a reconciliation of EBITDA to net income.

Free cash flow is a non-IFRS financial measure that is calculated as funds flow from operations less capital expenditures and repayment of lease liabilities. Management uses free cash flow to help measure the capacity of the Company to pay dividends and invest in business growth opportunities.

Free Cash Flow Reconciliation to Funds Flow from Operations

	Fiscal 2018		Fiscal 2019					**Fiscal 2020**
($ thousands)	Q3	Q4	Q1	Q2	Q3	Q4	Q1	**Q2**
Funds flow from operations	6,225	7,285	5,242	5,777	7,550	7,024	6,097	**7,787**
Capital expenditures	(630)	(381)	(333)	(80)	(253)	(76)	(108)	**(235)**
Repayment of lease liabilities	-	-	-	-	-	-	(282)	**(278)**
Free cash flow	5,595	6,904	4,909	5,697	7,297	6,948	5,707	**7,274**

Outlook

During the second quarter and year to date, our annuity and maintenance revenue increased by 8% compared to the same periods of the previous fiscal year, with all regions experiencing growth.

The US region increased by 9% in the second quarter and year to date, supported by increased licensing by both existing and new customers. Canada experienced its first quarter-over-quarter increase since fiscal 2015. While we view this as an indication of an improving operating environment in Canada compared to previous years, we continue to monitor consolidation activity in the industry and any impact it might have on our contract renewals in the latter part of the year. South America achieved double-digit growth for the second quarter in a row, resulting in a 15% year-to-date increase. The Eastern Hemisphere grew by 9% in the second quarter and 10% year to date. The growth in both of these regions was due to increased licensing by existing customers, as well as the addition of new customers. The strengthening of the US dollar relative to the Canadian dollar had a positive impact on revenue in these international regions.

While quarterly perpetual license revenue was comparable to the second quarter of the previous fiscal year, the year-to-date perpetual license revenue was up by 54% compared to the same period of the previous fiscal year, due to higher perpetual sales realized in the first quarter of fiscal 2020.

In July, CMG and Shell signed an amendment to our CoFlow development agreement. In order to achieve specific development targets and deployments across a broader range of Shell's assets, CMG will allocate more resources to CoFlow over the next two years, while Shell will increase its financial contribution accordingly. Pursuant to this amendment, during the three months ended September 30, 2019, CMG recorded higher professional services revenue for additional resources allocated to CoFlow development and support in the current and previous quarters. To date, CMG has added and/or internally reallocated 11 full-time equivalent positions (out of the 26 allowed by the amendment) to CoFlow development and support.

On April 1, 2019, CMG adopted IFRS 16 *Leases*. The new standard essentially moved most of the Company's office leases to the balance sheet, eliminating rent expense and replacing it with interest expense and repayment of lease liability, as well as depreciation of the right-of-use assets. The adoption of IFRS 16 resulted in a decrease to total operating expenses and an increase to finance costs, for a total negative impact of $0.1 million and $0.3 million on the Company's quarterly and year-to-date net income.

Despite the negative impact of the IFRS 16 adoption, the Company's quarterly and year-to-date net income increased by 36% and 21%, respectively (38% and 25% without the IFRS 16 impact), because of the solid revenue achievement. Without considering the IFRS 16 impact, our costs remained consistent on a quarter-over-quarter and year-over-year basis.

Similarly, our quarterly and year-to-date EBITDA increased to 52% and 49% of revenue, respectively (without the positive impact of applying IFRS 16, EBITDA increased to 48% and 44% of revenue, respectively).

We continue pursuing our goal of increasing software license sales, particularly internationally, with the support of various R&D initiatives (such as our public cloud offering, CoFlow development, product feature and functionality enhancements), while exercising fiscal prudence.

We ended the second quarter of 2020 with a strong balance sheet, no borrowings and $47.1 million in cash. During the quarter, we achieved free cash flow of $0.09 per share. Subsequent to quarter end, CMG's Board of Directors declared a quarterly dividend of $0.10 per share.

Ryan N. Schneider
President and Chief Executive Officer
November 12, 2019

Condensed Consolidated Statements of Financial Position

UNAUDITED (thousands of Canadian $)	**September 30, 2019**	March 31, 2019*
Assets		
Current assets:		
Cash	**47,050**	54,290
Trade and other receivables	**10,353**	19,220
Prepaid expenses	**1,320**	1,332
Prepaid income taxes (note 10)	**352**	367
	59,075	75,209
Property and equipment	**13,891**	14,501
Right-of-use assets	**38,950**	-
Deferred tax asset (note 10)	**1,080**	595
Total assets	**112,996**	90,305
Liabilities and shareholders' equity		
Current liabilities:		
Trade payables and accrued liabilities	**4,333**	6,162
Income taxes payable (note 10)	**-**	60
Deferred revenue (note 5)	**23,849**	34,653
Lease liability (note 6)	**1,290**	-
	29,472	40,875
Deferred revenue (note 5)	**-**	362
Lease liability (note 6)	**41,605**	-
Deferred rent liability	**-**	1,813
Total liabilities	**71,077**	43,050
Shareholders' equity:		
Share capital (note 11)	**79,851**	79,711
Contributed surplus	**13,209**	12,808
Deficit	**(51,141)**	(45,264)
Total shareholders' equity	**41,919**	47,255
Total liabilities and shareholders' equity	**112,996**	90,305

*The Company adopted IFRS 16 *Leases* effective April 1, 2019 using the modified retrospective approach. Under this method, comparative information is not restated. See note 3.

Subsequent event (note 15)

See accompanying notes to condensed consolidated interim financial statements.

Condensed Consolidated Statements of Operations and Comprehensive Income

UNAUDITED (thousands of Canadian $ except per share amounts)	Three months ended September 30 2019	2018*	Six months ended September 30 2019	2018*
Revenue (note 7)	**19,873**	17,941	**37,996**	34,646
Operating expenses				
Sales, marketing and professional services	**4,354**	4,378	**8,984**	9,365
Research and development (note 8)	**4,539**	4,862	**9,290**	9,637
General and administrative	**1,637**	1,677	**3,311**	3,246
	10,530	10,917	**21,585**	22,248
Operating profit	**9,343**	7,024	**16,411**	12,398
Finance income (note 9)	**541**	312	**644**	686
Finance costs (note 9)	**(534)**	(232)	**(1,266)**	-
Profit before income and other taxes	**9,350**	7,104	**15,789**	13,084
Income and other taxes (note 10)	**2,482**	2,048	**4,479**	3,770
Net and total comprehensive income	**6,868**	5,056	**11,310**	9,314
Earnings Per Share				
Basic (note 11(d))	**0.09**	0.06	**0.14**	0.12
Diluted (note 11(d))	**0.09**	0.06	**0.14**	0.12

*The Company adopted IFRS 16 *Leases* effective April 1, 2019 using the modified retrospective approach. Under this method, comparative information is not restated. See note 3.

See accompanying notes to condensed consolidated interim financial statements.

Condensed Consolidated Statements of Changes in Equity

UNAUDITED (thousands of Canadian $)	Common Share Capital	Contributed Surplus	Deficit	Total Equity
Balance, April 1, 2018	79,598	11,775	(35,309)	56,064
Total comprehensive income for the year	-	-	9,314	9,314
Dividends paid	-	-	(16,045)	(16,045)
Shares issued on redemption of restricted share units (note 11(b))	93	-	-	93
Shares issued for cash on exercise of stock options (note 11(b))	17	-	-	17
Stock-based compensation:				
Current period expense (note 11(c))	-	597	-	597
Stock options exercised (note 11(b))	3	(3)	-	-
Balance, September 30, 2018	79,711	12,369	(42,040)	50,040
Balance, April 1, 2019	**79,711**	**12,808**	**(45,264)**	**47,255**
Impact of change in accounting policy*	**-**	**-**	**(1,139)**	**(1,139)**
Adjusted balance, April 1, 2019	**79,711**	**12,808**	**(46,403)**	**46,116**
Total comprehensive income for the period	**-**	**-**	**11,310**	**11,310**
Dividends paid	**-**	**-**	**(16,048)**	**(16,048)**
Shares issued on redemption of restricted share units (note 11(b))	**140**	**-**	**-**	**140**
Stock-based compensation:				
Current period expense (note 11(c))	**-**	**401**	**-**	**401**
Balance, September 30, 2019	**79,851**	**13,209**	**(51,141)**	**41,919**

*The Company adopted IFRS 16 *Leases* effective April 1, 2019 using the modified retrospective approach. Under this method, comparative information is not restated. See note 3.

See accompanying notes to condensed consolidated interim financial statements.

Condensed Consolidated Statements of Cash Flows

	Three months ended September 30		Six months ended September 30	
UNAUDITED (thousands of Canadian $)	**2019**	2018*	**2019**	2018*
Operating activities				
Net income	**6,868**	5,056	**11,310**	9,314
Adjustments for:				
Depreciation	**1,083**	481	**2,133**	944
Deferred income tax expense (recovery) (note 10)	**58**	163	**(102)**	(183)
Stock-based compensation (note 11(c))	**(222)**	(29)	**543**	732
Deferred rent	**-**	106	**-**	212
Funds flow from operations	**7,787**	5,777	**13,884**	11,019
Movement in non-cash working capital:				
Trade and other receivables	**2,297**	415	**8,867**	6,181
Trade payables and accrued liabilities	**(5)**	577	**(1,739)**	(1,193)
Prepaid expenses	**(140)**	13	**(90)**	141
Income taxes payable	**314**	(377)	**(45)**	(700)
Deferred revenue	**(5,417)**	(6,128)	**(11,166)**	(10,455)
Increase in non-cash working capital	**(2,951)**	(5,500)	**(4,173)**	(6,026)
Net cash provided by operating activities	**4,836**	277	**9,711**	4,993
Financing activities				
Proceeds from the issue of common shares	**-**	17	**-**	17
Repayment of lease liability	**(278)**	-	**(560)**	-
Dividends paid	**(8,026)**	(8,024)	**(16,048)**	(16,045)
Net cash used in financing activities	**(8,304)**	(8,007)	**(16,608)**	(16,028)
Investing activities				
Property and equipment additions	**(235)**	(80)	**(343)**	(413)
Decrease in cash	**(3,703)**	(7,810)	**(7,240)**	(11,448)
Cash, beginning of period	**50,753**	60,081	**54,290**	63,719
Cash, end of period	**47,050**	**52,271**	**47,050**	**52,271**
Supplementary cash flow information				
Interest received (note 9)	**321**	324	**654**	626
Interest paid (notes 6 and 9)	**534**	-	**1,068**	-
Income taxes paid	**(1,986)**	(1,885)	**(4,060)**	(3,866)

* The Company adopted IFRS 16 *Leases* effective April 1, 2019 using the modified retrospective approach. Under this method, comparative information is not restated. See note 3.

See accompanying notes to condensed consolidated interim financial statements.

Notes to Condensed Consolidated Interim Financial Statements

For the three and six months ended September 30, 2019 and 2018 (unaudited).

1. Reporting Entity:

Computer Modelling Group Ltd. ("CMG") is a company domiciled in Alberta, Canada and is incorporated pursuant to the Alberta Business Corporations Act, with its Common Shares listed on the Toronto Stock Exchange under the symbol "CMG". The address of CMG's registered office is 3710 33 Street N.W., Calgary, Alberta, Canada, T2L 2M1. The condensed consolidated interim financial statements as at and for the three and six months ended September 30, 2019 comprise CMG and its subsidiaries (together referred to as the "Company"). The Company is a computer software technology company engaged in the development and licensing of reservoir simulation software. The Company also provides professional services consisting of highly specialized support, consulting, training, and contract research activities.

2. Basis of Preparation:

(a) Statement of Compliance:

These condensed consolidated interim financial statements have been prepared in accordance with International Accounting Standard ("IAS") 34 *Interim Financial Reporting.* Accordingly, they do not include all of the information required for full annual financial statements and should be read in conjunction with the Company's most recent annual consolidated financial statements as at and for the year ended March 31, 2019, which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

The Company adopted IFRS 16 *Leases* effective April 1, 2019. Changes to significant accounting policies are described in note 3.

In the first quarter of 2020, the Company changed the presentation of interest received and income taxes paid on the statement of cash flows. Prior periods have been revised to conform with the current period presentation.

These unaudited condensed consolidated interim financial statements as at and for the three and six months ended September 30, 2019 were authorized for issuance by the Board of Directors on November 12, 2019.

(b) Basis of Measurement:

The condensed consolidated interim financial statements have been prepared on the historical cost basis, which is based on the fair value of the consideration at the time of the transaction.

(c) Functional and Presentation Currency:

The condensed consolidated interim financial statements are presented in Canadian dollars, which is the functional currency of CMG and its subsidiaries. All financial information presented in Canadian dollars has been rounded to the nearest thousand.

(d) Use of Estimates, Judgments and Assumptions:

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies, the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue, costs and expenses. Estimates and underlying assumptions are reviewed on an ongoing basis. Actual results may differ from such estimates and it is possible that the differences could be material. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Significant estimates and judgments used in the preparation of these condensed consolidated interim financial statements were the same as those that applied to the consolidated financial statements for the year ended March 31, 2019, except for the Company's estimated incremental borrowing rate, as described in note 3.

3. Changes in Significant Accounting Policies:

Except as described below, the accounting policies applied in these condensed consolidated interim financial statements are the same as those applied in the Company's consolidated financial statements as at and for the year ended March 31, 2019.

IFRS 16 *Leases*

Effective April 1, 2019, the Company adopted IFRS 16 *Leases*, which replaces IAS 17 *Leases* and requires the recognition of most leases on the balance sheet. IFRS 16 effectively removes the classification of leases as either finance or operating leases and treats all leases as finance leases for lessees, with optional exemptions for short-term leases where the term is twelve months or less and for leases of low value items. The accounting treatment for lessors remains essentially unchanged, with the requirement to classify leases as either finance or operating.

The Company's only leases are office space leases, the most significant one being the twenty-year head office lease that commenced in 2017. The Company's accounting policy for leases under IFRS 16 is as follows:

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The assets are depreciated to the earlier of the end of the useful life of the right-of-use asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumptions of the future economic benefits. In addition, the right-of-use assets may be periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Since the Company does not have any debt, its incremental borrowing rate must be estimated using such factors as the amount of the funds that would be borrowed if the Company bought the underlying right-of-use asset, the length of the borrowing term, the nature and quality of the underlying right-of-use asset and the economic environment of the jurisdiction in which the asset is located. Subsequently, the lease liability is measured at amortized cost using the effective interest method. It is remeasured whenever there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

Cash payments for the principal portion of the lease liability are presented within the financing activities and the interest portion of the lease liability is presented within the operating activities of the statement of cash flows. Short-term lease payments not included in the measurement of the lease liability are presented within the operating activities of the statement of cash flows.

The Company applies the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

Under IAS 17

In the comparative period, all of the Company's leases were classified as operating leases and were not recognized in the Company's statement of financial position. Payments made under operating leases were recognized in profit or loss on a straight-line basis over the term of the lease. Since the lease agreement for the Company's head office contains a rent escalation clause, the difference between rent expense and rent payable for the period was recorded as deferred rent within long-term liabilities in the consolidated statement of financial position.

Impact on transition

The Company adopted IFRS 16 using the modified retrospective approach, by adjusting opening retained earnings with no restatement of comparative figures. As such, comparative information continues to be reported under IAS 17 and related interpretations.

For the head office lease, the right-of-use asset was measured at its carrying amount as if IFRS 16 had been applied since the lease commencement date, discounted using the Company's incremental borrowing rate at the date of initial application.

Deferred rent liability, which was required under the previous lease standard and is not required under IFRS 16, and prepaid rent were reversed against opening retained earnings. For all other office leases, each right-of-use asset was measured at an amount equal to the corresponding lease liability on April 1, 2019.

Upon transition, the Company applied the following practical expedients available under IFRS 16:

- did not recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases with a short-term remaining life as of the date of initial application. The lease payment associated with these leases will continue to be recognized as an expense on a straight-line basis over the lease term;
- excluded initial direct costs of the head office lease from the measurement of the right-of-use asset.

The following table reconciles the Company's operating lease commitments at March 31, 2019, as previously disclosed in the Company's consolidated financial statements, to the lease liability recognized on initial application of IFRS 16 at April 1, 2019:

(thousands of $)	
Operating lease commitments disclosed as at March 31, 2019	89,013
Operating cost commitments not recognized as a lease liability	(21,587)
Exemption for short-term leases	(634)
Discounting at the Company's incremental borrowing rate of 5%	(23,710)
Lease liability recognized as at April 1, 2019	**43,082**
Current	1,197
Long-term	41,885

The following table summarizes the impact of adopting IFRS 16 on the Company's consolidated statement of financial position at April 1, 2019:

(thousands of $)	March 31, 2019	Adjustments due to IFRS 16	April 1, 2019
Assets			
Current assets:			
Cash	54,290	-	54,290
Trade and other receivables	19,220	-	19,220
Prepaid expenses	1,332	(103)	1,229
Prepaid income taxes	367	-	367
	75,209	(103)	75,106
Property and equipment	14,501	-	14,501
Right-of-use assets	-	39,756	39,756
Deferred tax asset	595	384	979
Total assets	90,305	40,037	130,342
Liabilities and shareholders' equity			
Current liabilities:			
Trade payables and accrued liabilities	6,162	(93)	6,069
Income taxes payable	60	-	60
Deferred revenue	34,653	-	34,653
Lease liability	-	1,197	1,197
	40,875	1,104	41,979
Deferred revenue	362	-	362
Lease liability	-	41,885	41,885
Deferred rent liability	1,813	(1,813)	-
Total liabilities	43,050	41,176	84,226
Shareholders' equity:			
Share capital	79,711	-	79,711
Contributed surplus	12,808	-	12,808
Deficit	(45,264)	(1,139)	(46,403)
Total shareholders' equity	47,255	(1,139)	46,116
Total liabilities and shareholders' equity	90,305	40,037	130,342

Impact for the period

The following tables summarize the impact of adopting IFRS 16 on the Company's condensed consolidated interim financial statements as at and for the three and six months ended September 30, 2019:

Condensed Consolidated Statement of Financial Position

(thousands of $)	September 30, 2019 As reported	Adjustments	September 30, 2019 Balance without IFRS 16 adoption
Assets			
Current assets:			
Cash	47,050	-	47,050
Trade and other receivables	10,353	-	10,353
Prepaid expenses	1,320	34	1,354
Prepaid income taxes	352	-	352
	59,075	34	59,109
Property and equipment	13,891	-	13,891
Right-of-use assets	38,950	(38,950)	-
Deferred tax asset	1,080	(406)	674
Total assets	112,996	(39,322)	73,674
Liabilities and shareholders' equity			
Current liabilities:			
Trade payables and accrued liabilities	4,333	95	4,428
Deferred revenue	23,849	-	23,849
Lease liability	1,290	(1,290)	-
	29,472	(1,195)	28,277
Lease liability	41,605	(41,605)	-
Deferred rent liability	-	2,025	2,025
Total liabilities	71,077	(40,775)	30,302
Shareholders' equity:			
Share capital	79,851	-	79,851
Contributed surplus	13,209	-	13,209
Deficit	(51,141)	1,453	(49,688)
Total shareholders' equity	41,919	1,453	43,372
Total liabilities and shareholders' equity	112,996	(39,322)	73,674

Condensed Consolidated Statement of Operations and Comprehensive Income

(thousands of $ except per share amounts)	Three months ended September 30, 2019 As reported	Adjustments	Three months ended September 30, 2019 Balance without IFRS 16 adoption
Revenue	19,873	-	19,873
Operating expenses			
Sales, marketing and professional services	4,354	67	4,421
Research and development	4,539	229	4,768
General and administrative	1,637	55	1,692
	10,530	351	10,881
Operating profit	9,343	(351)	8,992
Finance income	541	-	541
Finance costs	(534)	528	(6)
Profit before income and other taxes	9,350	177	9,527
Income and other taxes	2,482	71	2,553
Net and total comprehensive income	6,868	106	6,974
Earnings Per Share			
Basic	0.09	-	0.09
Diluted	0.09	-	0.09

(thousands of $ except per share amounts)	Six months ended September 30, 2019 As reported	Adjustments	Six months ended September 30, 2019 Balance without IFRS 16 adoption
Revenue	37,996	-	37,996
Operating expenses			
Sales, marketing and professional services	8,984	133	9,117
Research and development	9,290	458	9,748
General and administrative	3,311	110	3,421
	21,585	701	22,286
Operating profit	16,411	(701)	15,710
Finance income	644	-	644
Finance costs	(1,266)	1,039	(227)
Profit before income and other taxes	15,789	338	16,127
Income and other taxes	4,479	23	4,502
Net and total comprehensive income	11,310	315	11,625
Earnings Per Share			
Basic	0.14	-	0.14
Diluted	0.14	-	0.14

The Company's actual cash flows are unaffected by IFRS 16. However, the principal reduction portion of lease payments is now classified as financing activities instead of operating activities:

Condensed Consolidated Statement of Cash Flows

(thousands of $)	Three months ended September 30, 2019 As reported	Adjustments	Three months ended September 30, 2019 Balance without IFRS 16 adoption
Net cash provided by operating activities	4,836	(278)	4,558
Net cash used in financing activities	(8,304)	278	(8,026)

(thousands of $)	Six months ended September 30, 2019 As reported	Adjustments	Six months ended September 30, 2019 Balance without IFRS 16 adoption
Net cash provided by operating activities	9,711	(560)	9,151
Net cash used in financing activities	(16,608)	560	(16,048)

4. Segmented Information:

The Company is organized into one operating segment represented by the development and licensing of reservoir simulation software. The Company provides professional services, consisting of support, training, consulting and contract research activities, to promote the use and development of its software; however, these activities are not evaluated as a separate business segment.

Property, equipment and right-of-use assets of the Company are located in the following geographic regions (for revenue by geographic region, refer to note 7):

(thousands of $)	**September 30, 2019**	March 31, 2019
Canada	**51,228**	14,215
United States	**1,088**	152
South America	**460**	74
Eastern Hemisphere(1)	**65**	60
	52,841	14,501

(1) Includes Europe, Africa, Asia and Australia.

5. Deferred Revenue:

The following table presents changes in the deferred revenue balance for the six months ended September 30, 2019:

(thousands of $)	
Balance, March 31, 2019	35,015
Invoiced during the period, excluding amount recognized as revenue during the period	12,392
Recognition of deferred revenue included in the adjusted balance at the beginning of the period	(23,558)
Balance, September 30, 2019	**23,849**
Current	23,849
Long-term	-

6. Lease Liability:

(thousands of $)	
Balance, March 31, 2019	-
Adjustment on initial application of IFRS 16	43,082
Adjusted Balance, April 1, 2019	43,082
Additions	373
Interest on lease liability (note 9)	1,068
Lease payments	(1,628)
Balance, September 30, 2019	**42,895**
Current	1,290
Long-term	41,605

The following table presents contractual undiscounted payments for lease liability as at September 30, 2019:

(thousands of $)	
Less than one year	3,390
Between one and five years	14,126
More than five years	48,068
Total undiscounted payments	**65,584**

7. Revenue:

In the following table, revenue is disaggregated by geographical region and timing of revenue recognition:

(thousands of $)	Three months ended September 30 2019	Three months ended September 30 2018	Six months ended September 30 2019	Six months ended September 30 2018
Annuity/maintenance license revenue				
Canada	**3,927**	3,792	**7,703**	7,659
United States	**5,050**	4,626	**9,984**	9,179
South America	**1,971**	1,732	**3,916**	3,413
Eastern Hemisphere	**5,425**	4,961	**10,526**	9,575
	16,373	15,111	**32,129**	29,826
Perpetual license revenue				
Canada	**-**	156	**-**	156
United States	**-**	152	**298**	152
South America	**-**	-	**769**	-
Eastern Hemisphere	**1,146**	864	**1,238**	1,190
	1,146	1,172	**2,305**	1,498
Total software license revenue	**17,519**	16,283	**34,434**	31,324
Professional services				
Canada	**2,144**	1,066	**3,169**	2,153
United States	**12**	131	**65**	287
South America	**25**	189	**68**	359
Eastern Hemisphere	**173**	272	**260**	523
	2,354	1,658	**3,562**	3,322
Total revenue				
Canada	**6,071**	5,014	**10,872**	9,968
United States	**5,062**	4,909	**10,347**	9,618
South America	**1,996**	1,921	**4,753**	3,772
Eastern Hemisphere	**6,744**	6,097	**12,024**	11,288
	19,873	17,941	**37,996**	34,646

The amount of revenue recognized during the six months ended September 30, 2019 from performance obligations satisfied (or partially satisfied) in previous periods is $1.6 million.

The Company applies the practical expedient available under IFRS 15 and does not disclose the amount of the transaction price allocated to unsatisfied performance obligations if the underlying contract has an expected duration of one year or less.

Receivables from contracts with customers were as follows:

(thousands of $)	September 30, 2019	March 31, 2019
Receivables (included in "Trade and other receivables")	**9,804**	16,783

In the six months ended September 30, 2019, one customer comprised 11.0% (September 30, 2018 – nil customers over 10%) of the Company's total revenue.

8. Research and Development Costs:

Three months ended September 30, (thousands of $)	2019	2018
Research and development	4,970	5,239
Scientific research and experimental development ("SR&ED") investment tax credits	(431)	(377)
	4,539	4,862

Six months ended September 30, (thousands of $)	2019	2018
Research and development	10,162	10,424
Scientific research and experimental development ("SR&ED") investment tax credits	(872)	(787)
	9,290	9,637

9. Finance Income and Finance Costs:

Three months ended September 30, (thousands of $)	2019	2018
Interest income	321	312
Net foreign exchange gain	220	-
Finance income	541	312
Interest expense on lease liability (note 6)	(534)	-
Net foreign exchange loss	-	(232)
Finance costs	(534)	(232)

Six months ended September 30, (thousands of $)	2019	2018
Interest income	644	615
Net foreign exchange gain	-	71
Finance income	644	686
Interest expense on lease liability (note 6)	(1,068)	-
Net foreign exchange loss	(198)	-
Finance costs	(1,266)	-

10. Income and Other Taxes:

The major components of income tax expense are as follows:

Six months ended September 30, (thousands of $)	2019	2018
Current year income tax expense	4,451	3,857
Adjustment for prior year	51	8
Current income taxes	4,502	3,865
Deferred tax recovery	(102)	(183)
Foreign withholding and other taxes	79	88
	4,479	3,770

The provision for income and other taxes reported differs from the amount computed by applying the combined Canadian Federal and Provincial statutory rate to the profit before income and other taxes. The reasons for this difference and the related tax effects are as follows:

Six months ended September 30, (thousands of $, unless otherwise stated)	**2019**	2018
Combined statutory tax rate	**26.00%**	27.00%
Expected income tax	**4,105**	3,533
Effect of statutory tax rate reduction	**187**	-
Non-deductible costs	**168**	226
Effect of tax rates in foreign jurisdictions	**(6)**	(3)
Withholding taxes	**12**	27
Adjustment for prior year	**27**	8
Other	**(14)**	(21)
	4,479	3,770

The components of the Company's deferred tax asset are as follows:

(thousands of $)	**September 30, 2019**	March 31, 2019
SR&ED investment tax credits	**(124)**	(247)
Property and equipment	**130**	116
Right-of-use assets	**872**	-
Deferred rent	**-**	489
Stock-based compensation liability	**202**	237
Net deferred tax asset	**1,080**	595

All movement in deferred tax assets and liabilities is recognized through net income of the respective period.

Prepaid income taxes and current income taxes payable have not been offset as the amounts relate to income taxes levied by different tax authorities on different taxable entities.

11. Share Capital:

(a) Authorized:

An unlimited number of Common Shares, an unlimited number of Non-Voting Shares, and an unlimited number of Preferred Shares, issuable in series.

(b) Issued:

(thousands of shares)	Common Shares
Balance, April 1, 2018	80,215
Issued on redemption of restricted share units	10
Issued for cash on exercise of stock options	2
Balance, September 30, 2018	80,227
Balance, April 1, 2019	**80,227**
Issued on redemption of restricted share units	**22**
Balance, September 30, 2019	**80,249**

On May 23, 2018, the Board of Directors considered the merits of renewing the Company's shareholder rights plan on or before the third-year anniversary of shareholder approval of the plan and determined that it was in the best interest of the Company to continue to have a shareholder rights plan in place. The Board of Directors approved an amended and restated rights plan (the "Amended and Restated Rights Plan") between the Company and Computershare Trust Company of Canada. The Amended and Restated Rights Plan is similar in all respects to the existing shareholder rights plan, with the exception of certain minor amendments. The Amended and Restated Rights Plan was approved by the Company's shareholders on July 12, 2018.

(c) Stock-Based Compensation:

Stock-Based Compensation Expense

The following table summarizes stock-based compensation expense:

Three months ended September 30, (thousands of $)	**2019**	2018
Equity-settled plans	**185**	264
Cash-settled plans	**37**	(69)
Total stock-based compensation expense	**222**	195

Six months ended September 30, (thousands of $)	**2019**	2018
Equity-settled plans	**401**	597
Cash-settled plans	**586**	359
Total stock-based compensation expense	**987**	956

Liability Recognized for Stock-Based Compensation (1)

The following table summarizes liabilities for the Company's cash-settled plans, recorded within trade payables and accrued liabilities:

(thousands of $)	**September 30, 2019**	March 31, 2019
SARs	**90**	76
RSUs	**522**	654
DSUs	**266**	145
Total stock-based compensation liability	**878**	875

(1) The intrinsic value of the vested awards at September 30, 2019 was $0.3 million.

The Company has several stock-based compensation plans, including a stock option plan, a share appreciation rights plan, a performance share unit and restricted share unit plan, and a deferred share unit plan.

The maximum number of Common Shares reserved for issuance under the Company's security-based compensation plans is limited to 10% of the issued and outstanding Common Shares. Based on this calculation, at September 30, 2019, the Company may reserve up to 8,024,000 Common Shares for issuance under its security-based compensation plans.

(i) Stock Option Plan

The Company adopted a rolling stock option plan as of July 13, 2005, which was reaffirmed by the Company's shareholders on July 13, 2017. Pursuant to the stock option plan, the maximum term of an option granted cannot exceed five years from the date of grant. The outstanding stock options vest as to 50% after the first year anniversary from date of grant and then vest as to 25% of the total options granted after each of the second and third year anniversary dates.

The following table outlines changes in stock options:

	Six months ended September 30, 2019		Year ended March 31, 2019	
	Number of Options (thousands)	**Weighted Average Exercise Price ($/share)**	Number of Options (thousands)	Weighted Average Exercise Price ($/share)
Outstanding at beginning of period	**5,108**	**11.34**	6,787	11.78
Granted	**708**	**6.31**	524	9.12
Exercised	**-**	**-**	(2)	9.78
Forfeited/expired	**(1,875)**	**12.88**	(2,201)	12.17
Outstanding at end of period	**3,941**	**9.70**	5,108	11.34
Options exercisable at end of period	**2,770**	**10.65**	3,969	11.92

The range of exercise prices of stock options outstanding and exercisable at September 30, 2019 is as follows:

	Outstanding			Exercisable	
Exercise Price ($/option)	Number of Options (thousands)	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price ($/option)	Number of Options (thousands)	Weighted Average Exercise Price ($/option)
6.31 to 6.60	720	4.9	6.32	-	-
6.61 to 9.20	490	3.9	9.20	245	9.20
9.21 to 9.33	831	2.9	9.33	625	9.33
9.34 to 9.78	778	1.9	9.78	778	9.78
9.79 to 13.98	1,122	0.9	12.31	1,122	12.31
	3,941	2.6	9.70	2,770	10.65

The fair value of stock options was estimated using the Black-Scholes option pricing model under the following assumptions:

	Six months ended September 30, 2019	Year ended March 31, 2019
Fair value at grant date ($/option)	**0.72 to 0.85**	0.83 to 1.63
Share price at grant date ($/share)	**6.31**	6.60 to 9.20
Risk-free interest rate (%)	**1.28 to 1.33**	1.77 to 2.17
Estimated hold period prior to exercise (years)	**3 to 4**	3 to 4
Volatility in the price of common shares (%)	**28 to 31**	29 to 31
Dividend yield per common share (%)	**6.28**	4.33 to 6.16

(ii) Share Appreciation Rights Plan

The Company adopted a share appreciation rights plan (“SAR Plan”) in November 2015. A share appreciation right (“SAR”) entitles the holder to receive a cash payment equal to the difference between the stated exercise price and the market price of the Company’s Common Shares on the date the SAR is exercised. The SARs are granted to executive officers and employees residing and working outside of Canada. The outstanding SARs vest as to 50% after the first year anniversary from date of grant and then vest as to 25% of the total awards granted after each of the second and third year anniversary dates. The SARs have a five-year life.

The following table outlines changes in SARs:

	Six months ended September 30, 2019		Year ended March 31, 2019	
	Number of SARs (thousands)	**Weighted Average Exercise Price ($/SAR)**	Number of SARs (thousands)	Weighted Average Exercise Price ($/SAR)
Outstanding at beginning of period	**952**	**9.38**	583	9.50
Granted	**221**	**6.31**	389	9.20
Forfeited	**-**	**-**	(20)	9.35
Outstanding at end of period	**1,173**	**8.80**	952	9.38
SARs exercisable at end of period	**675**	**9.44**	339	9.54

(iii) Share Unit Plans

Performance Share Units (PSUs) and Restricted Share Units (RSUs)

The Performance Share Unit and Restricted Share Unit Plan (“PSU & RSU Plan”) is open to all employees and contractors of the Company. PSUs cliff-vest at the end of three years, with the vesting multiplier ranging from 0.0 to 2.0 contingent upon achieving certain corporate performance criteria. RSUs vest annually over a three-year period. Upon vesting PSUs and RSUs can be exchanged for Common Shares of the Company or surrendered for cash. As such, the Company accounts for PSUs and RSUs as cash-settled awards and recognizes a liability for potential cash settlements.

The International Employees PSU & RSU Plan includes substantially the same terms, conditions and PSU performance criteria as the PSU & RSU Plan, with the main two exceptions being that (i) it is available only to employees and contractors residing and working outside of Canada and (ii) PSUs and RSUs under this plan can be redeemed for cash only. As such, the Company accounts for PSUs and RSUs issued under the International Employees PSU & RSU Plan as cash-settled awards and recognizes a liability for potential cash settlements.

Deferred Share Units (DSUs)

The DSU Plan was adopted in May 2017 and is limited to non-employee members of the Board of Directors. DSUs vest immediately, but are redeemable for cash only after a director ceases Board membership.

The following table summarizes the activity related to the Company’s share unit plans:

(thousands)	**Six months ended September 30, 2019**			Year ended March 31, 2019		
	RSUs	**PSUs**	**DSUs**	RSUs	PSUs	DSUs
Outstanding at beginning of period	**237**	**-**	**24**	108	-	11
Granted	**301**	**29**	**20**	173	-	13
Exercised	**(91)**	**-**	**-**	(36)	-	-
Forfeited	**(18)**	**-**	**-**	(8)	-	-
Outstanding at end of period	**429**	**29**	**44**	237	-	24

(d) Earnings Per Share:

The following table summarizes the earnings and weighted average number of Common Shares used in calculating basic and diluted earnings per share:

Three months ended September 30, (thousands except per share amounts)	**2019**			2018		
	Earnings ($)	**Weighted Average Shares Outstanding**	**Earnings Per Share ($/share)**	Earnings ($)	Weighted Average Shares Outstanding	Earnings Per Share ($/share)
Basic	**6,868**	**80,237**	**0.09**	5,056	80,221	0.06
Dilutive effect of stock options		**165**			72	
Diluted	**6,868**	**80,402**	**0.09**	5,056	80,293	0.06

Six months ended September 30, (thousands except per share amounts)	**2019**			2018		
	Earnings ($)	**Weighted Average Shares Outstanding**	**Earnings Per Share ($/share)**	Earnings ($)	Weighted Average Shares Outstanding	Earnings Per Share ($/share)
Basic	**11,310**	**80,232**	**0.14**	9,314	80,218	0.12
Dilutive effect of stock options		**167**			71	
Diluted	**11,310**	**80,399**	**0.14**	9,314	80,289	0.12

During the three and six months ended September 30, 2019, 171,000 and 231,000 awards, respectively (three and six months ended September 30, 2018 – 74,000 and 219,000 awards, respectively), were excluded from the computation of the weighted average number of diluted shares outstanding because their effect was not dilutive.

12. Financial Instruments:

Financial assets include cash and trade and other receivables which are classified as and measured at amortized cost, which approximates their fair values.

Financial liabilities include trade payables and accrued liabilities which are classified as other financial liabilities and are measured at amortized cost, which approximates their fair values.

13. Commitments:

(a) Research Commitments:

CMG, in partnership with Shell Global Solutions International B.V. ("Shell"), is the developer of CoFlow, the newest generation of reservoir and production system simulation software. Under a five-year agreement entered into by Shell and CMG on January 1, 2017 (the "CoFlow Agreement"), CMG is responsible for the research and development costs of CoFlow (estimated to be $8.2 million in fiscal 2020), while Shell provides a fixed fee contribution for the continuing development of the software (estimated to be $4.0 million in fiscal 2020).

Pursuant to the CoFlow Agreement, during the three and six months ended September 30, 2019, the Company recorded CoFlow revenue of $1.0 million and $2.0 million, respectively, to professional services revenue (three and six months ended September 30, 2018 – $1.0 million and $2.0 million) and CoFlow costs of $1.6 million and $3.3 million, respectively, to research and development expenses (three and six months ended September 30, 2018 – $1.9 million and $3.8 million).

In July of 2019, CMG and Shell signed an amendment to the CoFlow Agreement. In order to achieve specific development targets and deployments across a broader range of Shell's assets, CMG will allocate more resources to CoFlow over the next two years, while Shell will increase its financial contribution accordingly. The cost of additional resources allocated to CoFlow is expected to be in the range of $4.5 – $6.5 million on an annualized basis by the end of fiscal 2020. Pursuant to this amendment, during the three months ended September 30, 2019, the Company recorded an additional $1.1 million as professional services revenue from Shell for additional resources allocated to CoFlow.

(b) Commitments:

Upon adoption of IFRS 16 *Leases* on April 1, 2019, lease commitments within the scope of that standard have been recognized as lease liabilities and are now disclosed in note 6. The following table reconciles the Company's operating lease commitments at March 31, 2019, as previously disclosed, to non-IFRS 16 commitments at April 1, 2019 and September 30, 2019:

(thousands of $)	
Operating lease commitments disclosed as at March 31, 2019	89,013
Remove portion related to IFRS 16 *Leases*	(66,747)
Non-lease component of office leases, April 1, 2019	22,266
Commitments recognized as lease liability upon lease commencement	(528)
Payments made year to date	(652)
Non-lease component of office leases, September 30, 2019	21,086

The Company's non-IFRS 16 commitments include operating cost commitments and short-term office leases:

(thousands of $)	As at September 30, 2019
Less than one year	1,161
Between one and five years	4,659
More than five years	15,266
	21,086

14. Line Of Credit:

The Company has arranged for a $2.0 million line of credit with its principal banker, which can be drawn down by way of a demand operating credit facility or may be used to support letters of credit. As at September 30, 2019, $1.1 million (March 31, 2019 – $1.1 million) had been reserved on this line of credit for letters of credit supporting performance bonds.

15. Subsequent Event:

On November 12, 2019, the Board of Directors declared a quarterly cash dividend of $0.10 per share on its Common Shares, payable on December 13, 2019 to all shareholders of record at the close of business on December 5, 2019.

CORPORATE INFORMATION

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Patrick R. Jamieson (3)

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Mark R. Miller

Ryan N. Schneider

Robert F. M. Smith (2)

John B. Zaozirny
Chairman of the Board

(1) Chair, Audit Committee
(2) Member, Audit Committee
(3) Chair, Governance Committee
(4) Member, Governance Committee
(5) Vice Chairman of the Board

Officers

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President and Chief Executive Officer

Sandra Balic
Vice President,
Finance and Chief Financial Officer

Jim C. Erdle
Vice President,
USA & Latin America

R. David Hicks
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Stock Exchange Listing

Toronto Stock Exchange: **CMG**